

# PermaSense<sup>TM</sup> 3-15

For use outdoors as an Ultra-Low Volume (ULV) application to control adult mosquitoes in residential and recreational areas.

Also for use against biting and non-biting midges and black flies.

For use only by federal, state, tribal or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications, or by persons under their direct supervision.

## ACTIVE INGREDIENTS:

Permethrin (3-Phenoxyphenyl) methyl (+/-) cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethyl cyclopropanecarboxylate:	3.0%
Piperonyl Butoxide*:	15.0%
OTHER INGREDIENTS**:	82.0%
TOTAL:	100.0%

Contains 0.222 pounds of Permethrin and 1.113 pounds of Piperonyl Butoxide per gallon

\* PBO (butyl carbityl) (6-propylpiperonyl) ether and related compounds

\*\* Contains petroleum distillate

## KEEP OUT OF REACH OF CHILDREN CAUTION

See Inside Booklet for Additional Precautionary Statements.

### FIRST AID

<b>IF SWALLOWED:</b>	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
<b>IF ON SKIN OR CLOTHING:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>IF INHALED:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.
<b>IF IN EYES:</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Call a poison control center or doctor for treatment advice.

### HOTLINE NUMBER

Have product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact SafetyCall® International (866) 897-8050 for emergency medical treatment information.

**NOTE TO PHYSICIAN:** Product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**CAUTION.** Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are: barrier laminate, nitrile rubber, neoprene rubber, or Viton.

Mixers, loaders, applicators, and other handlers must wear :

- Long-sleeved shirt and long pants,
- Shoes plus socks.

In addition, all handlers except for applicators using motorized ground equipment, pilots and flaggers, must wear chemical-resistant gloves. In addition, mixers/loaders, persons cleaning equipment, and other persons exposed to the concentrate must wear a chemical-resistant apron. See engineering controls for additional requirements.



User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

User Safety Recommendations

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Engineering Controls

Pilots must use an enclosed cockpit that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

Environmental Hazards

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or wash waters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes, or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

Physical and Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Not for use in metered release systems. Not for use in outdoor residential misting systems. Do not contaminate crop land (other than crops listed), or potable water supplies with spray drift. Do not make applications during rain.

USE INFORMATION

**PermaSease™ 3-15** is approved for applications as an Ultra-Low Volume (ULV) nonthermal aerosol (cold fog) to control adult mosquitoes in residential and recreational areas and other areas these insects occur, such as but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas and municipalities, gardens, playgrounds, and overgrown waste areas.

**PermaSease™ 3-15** can be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes within or adjacent to these areas. Application can be made where the following crops are present:

Alfalfa	Garlic
Almond	Horseradish
Apple	Leafy greens subgroup 4A
Artichoke	Leaf petioles subgroup 4B
Asparagus	Lettuce, head
Avocado	Mushroom
Broccoli	Onion bulb
Brussels sprouts	Peach
Cabbage	Pepper, bell
Cauliflower	Pistachio
Celery	Potato
Cherry	Range grasses
Corn, sweet, kernel + cob with husks removed	Soybean, seed
Corn, forage	Spinach
Corn, grain	Tomato
Corn, stover	Vegetable cucurbit, group 9*
Eggplant	Walnut
Fruit, pome, group 11	Watercress

\*40 CFR 180.41 Crop Group 9: Cucurbit Vegetables, includes Crop Subgroup 9A (melon) and Crop Subgroup 9B (squash/cucumber).

In the treatment of corrals, feedlots, swine lots, poultry ranges and zoos cover any exposed drinking water, drinking fountains, and animal feed before application.

For best results treat when mosquitoes are most active and weather conditions are conducive to keeping the spray cloud close to the ground. An inversion of air temperatures and a light breeze is preferable. Application in calm air conditions is to be avoided. Apply only when wind speed is greater than 1 mph. Air temperature should be greater than 50°F when conducting all types of applications.

Do not treat a site with more than 0.007 lb. permethrin and 0.035 lb. piperonyl butoxide per acre in a 3-day period. Retreatments within a 3-day period shall not exceed 0.007 total lbs. permethrin or 0.035 total lbs. piperonyl butoxide in any site. Do not exceed 25 applications at maximum labeled rate (0.005 lbs. permethrin/0.025 lbs. piperonyl butoxide per acre) at any site in one year. When targeting *Aedes taeniorhyncus* and other difficult species, applications may be made up to 0.007 lbs. permethrin and 0.035 lbs. piperonyl butoxide (4.0 fl. oz PCT 3-15 ULV) per acre. Do not exceed 0.18 lbs. of permethrin or 0.90 lbs. piperonyl butoxide per acre per site per year. When rotating this product with other insecticides containing piperonyl butoxide, do not exceed 2 lbs. piperonyl butoxide per acre per site per year. More frequent applications may be made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

SPRAY DROPLET SIZE DETERMINATION

**Ground-based Application:** Spray equipment must be adjusted so that the volume median diameter (VMD) is less than 30 microns (Dv 0.5 < 30 µm) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 50 µm). Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.



**Aerial Application made at or below 200 feet above ground elevation:** Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv 0.5 < 60 µm) and that 90% of the spray is contained in droplets smaller than 100 microns (Dv 0.9 < 100 µm). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

**Aerial Application made at greater than 200 feet above ground elevation:** Spray equipment must be adjusted so that the volume median diameter produced is less than 70 microns (Dv 0.5 < 70 µm) and that 90% of the spray is contained in droplets smaller than 145 microns (Dv 0.9 < 145 µm). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

**GROUND APPLICATION**

Apply **PermaSease™ 3-15** through standard ULV cold aerosol or non-thermal aerosol (cold fog) generators undiluted at a flow rate of 3.1 to 17.4 fluid ounces per minute, and an average vehicle speed of 10 MPH. If a different vehicle speed is used, adjust rate accordingly. These rates are equivalent to 0.00088 to 0.005 pounds of Permethrin and 0.0044 to 0.0264 pounds of Piperonyl Butoxide per acre. An accurate flow meter must be used to ensure the proper flow rates.

Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high.

Permethrin/ PBO Pounds per Acre	Application Rates Fl. oz./Min.				Fl. oz. PermaSease™ 3-15 per Acre
	5MPH	10MPH	15MPH	20MPH	
0.005/0.025	8.7	17.4	26.1	34.9	2.88
0.0025/0.0125	4.4	8.7	13.1	17.4	1.44
0.00088/0.0044	1.5	3.1	4.6	6.1	0.51

Failure to follow the above directions may result in reduced effectiveness.

**AERIAL APPLICATION**

**PermaSease™ 3-15** may be applied undiluted at rates of 0.0025 to 0.005 pounds Permethrin (1.44 to 2.88 fl. oz. **PermaSease™ 3-15**) per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. Do not apply by fixed wing aircraft at a height less than 100 feet, or by helicopter at a height less than 75 feet unless specifically approved by the state or tribe based on public health needs. Aerial applications shall only be made when recommended by public health officials and trained personnel of mosquito abatement districts and other mosquito control programs.

**IN FLORIDA:** Aerial applications of this product require trained personnel to perform industry accepted assays to monitor resistance formation in targeted mosquitoes.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container handling:** Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent), then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Refillable Containers:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**WARRANTY STATEMENT**

NOTICE: To the extent provided by law, seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.

